

STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



April 2, 2002

Ms. Shari Kolak Remedial Project Manager United States Environmental Protection Agency Region 5, Superfund Division 77 West Jackson Boulevard (SR-6J) Chicago, Illinois 60604-3507

SUBJECT: Public Comments in Response to Alternatives Presented in the Draft Remedial

Investigation/Feasibility Study (RI/FS) Submitted by the KRSG, October 2000

Dear Ms. Kolak:

In October 2000, the Kalamazoo River Study Group (KRSG) submitted a draft remedial investigation/feasibility study (RI/FS) report for the Phase I reaches of the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund site. The KRSG consists of Millennium Holdings, Incorporated, Georgia-Pacific Corporation, Fort James Corporation, and Plainwell, Incorporated, all of which are potentially responsible parties (PRPs) for the site. As part of the Michigan Department of Environmental Quality's (MDEQ) review process, the KRSG's draft RI/FS was released for public comment. The public comment period (with extensions) lasted approximately eight months. To facilitate public comment, the draft document was:

- placed in six community information repositories established for the site
- provided to a library in the nearby Holland community
- provided to the community's technical assistance grant (TAG) consultant
- sent directly to organized citizen environmental groups
- discussed in formal public meetings (announced via local newspaper, MDEQ event calendars, and environmental list-servers)
- available on the MDEQ web page in "portable document format" files
- made available (free of charge) on compact disk to any person requesting a copy (approximately 60 copies were sent to requestors).

In unrelated outreach efforts, representatives of the KRSG distributed RI/FS summary "fact sheets" to various community members, gave summary presentations to several community organizations, and developed a web site of their own. The MDEQ did not participate in or approve these independent KRSG activities.

In response to the draft RI/FS document, many hundreds of letters, e-mails, and formal resolutions were submitted to the MDEQ by the following broad stakeholder groups:

- citizens
- community organizations
- local agencies and officials
- industry representatives
- legislators

Public comments were collected by the Environmental Response Division of the MDEQ, where they were indexed, copied, and entered into a database. Use of the database facilitated statistical analysis and organization of the comments. Considering the transfer of the enforcement lead to the United States Environmental Protection Agency (U.S. EPA), the MDEQ is submitting this letter to provide a summary of the comments received during the public comment period of the draft RI/FS. This information may be helpful to the U.S. EPA in updating the community relations plan or implementing OSWER Directive 9285.6-08, which calls for consideration of community participation and societal impacts as one of its 11 principles. This letter will allow the U.S. EPA to gauge public acceptance of the draft RI/FS and the limited alternatives described therein. While community acceptance of remedial alternatives cannot be completely assessed until receipt of comments on a formal proposed plan, public comment on the draft RI/FS gives the agencies a head start in determining the issues important to the communities along the river.

Summary

During the public comment period, the MDEQ received a total of 658 letters, e-mails and resolutions. Here and after, each type of correspondence will be collectively referred to as "letters". These letters were received from an estimated 732 respondents (calculated by adding letters with multiple signatures and subtracting persons who submitted multiple letters). To help report and analyze the letters, they were organized by stakeholder type, and the letters were broken down into individual comments, which were further categorized. The following table presents the total number of letters received from the different stakeholder groups concerned with the Kalamazoo River Superfund site.

Stakeholder Type	Letters Received	Percent of Received
Citizens	592	90 percent
Community Organizations	28	4.3 percent
Local Agencies and Officials	22	3.3 percent
Industry Representatives	13	2.0 percent
Legislators	3	0.4 percent
Total	658	

Actual sample comments can be found in Appendices A through E, attached to this letter. The major findings from all letters were as follows:

Clearly, the public does not accept "monitored natural attenuation" alternatives and
almost all respondents wrote letters opposing the PRP-preferred remedy. It was
commonly cited that by leaving the polychlorinated biphenyl (PCB)-contaminated
material in and around the river, the remedy would not adequately reduce risks to human
health or the environment within a reasonable timeframe. Many respondents also
questioned the PRP-projected success of natural attenuation processes in this system.

- All responses that pertained to the draft RI/FS were critical of the accuracy, bias, and completeness of the document. Many people found some of the data analysis methods to be unreliable and the remedial alternatives presented to be inadequate.
- A majority of the letters asked that the final RI/FS include a protective set of cleanup standards, consistent with site risk assessments; some responses suggested actual target values based on the Bryant Mill Pond removal action.
- Over half of the letters contained responses in support of the Kalamazoo River Protection Association (KRPA) and their position on the issues.
- Nearly half of all respondents expressed that the MDEQ has been too lenient with the PRPs, especially regarding delays in the investigation and cleanup process.
- Many respondents expressed concerns about the impacts of PCB contamination on human health.

There was a consistent and strong tendency of a pro-cleanup, anti PRP stance on these issues. This may be, in part, attributable to the work of environmental action groups in the Kalamazoo River area and to the prevalence of form letters (approximately 390 received) that these groups distributed; however the opinions expressed in each form letter are seen as individually valid. The fact that so many people took the time to read, sign, and send a letter is, in itself, an indication of solid community interest in aggressively protecting the resource of the Kalamazoo River. One variation of a form letter, submitted by multiple citizens, community groups, and local agencies, was a resolution originally produced by the KRPA. The text of this resolution can be found in Appendix F.

When all letters received were broken down into individual responses, the categories in the table below were developed. Categories were established to allow all relevant comments to be properly identified and counted. This table contains a count of the number of responses by each category. Please note that any particular letter may have responses in more than one category, but was never counted twice in any single category.

Some categories consisted of issues on which a respondent would either be "for" or "against" a certain position. These categories included *Accuracy and Completeness of RI/FS* and *PRP-Preferred Remedy*. Other categories were more general, where a comment would simply express a concern with a certain issue, as opposed to a clear stance on that issue.

Count of Total Comments per Category						
Index	Category	Citizens	Citizen Groups	Industry Groups	Legislators	Local Agencies
1	Accuracy and Completeness of RI/FS	433	14	6		3
2a	PRP Preferred Remedy – Against	464	17	7	2	12
2b	PRP Preferred Remedy – For	1				
3	Request for Agency Completion of RI/FS	436	12	6	1	9
4	Alternative Cleanup Options - dry dredging	151	4	3		3
5	Alternative Cleanup Options – innovative technologies	2	1	2		
6	Alternative Cleanup Options - KRPA plan	26	10	4	1	7
7	KRPA Preferred Cleanup Schedule	320	5	3	1	8
8a	Cleanup - PCB Removal – Against	2				
8b	Cleanup - PCB Removal – For	54	3	2		4
9	Cleanup Standards	409	8	5		4
10	Disposal of PCB Contaminated Materials	405	7	3		8
11	Ecological Impacts	16		2	1	4
12	Ecological Restoration After Cleanup	267	6	4		3
13	Health Impacts	105	4	2		3
14	Recreation Impacts of Contamination	4	1	2		1
15	Recreation Impacts of Remedy	406	6	3		7
16	Tourism Impacts	286	3	1		3
17	PRP Past Actions	13	2	1	1	2
18	Cost of Remedy - Liability of PRPs	47	4	1		1
19	MDEQ Policies/Treatment of PRPs	245	11		1	1
20	Project Transfer to EPA	3		1		2
21	Possible Conflict of Interest in MSU Project		1			

These categories included *Health Impacts*, *Recreation Impacts of Contamination*, and *Cleanup Standards*. In most cases, even with the "for" or "against" categories, the vast majority of the comments received fell on the same side of the issues. Generally, within each category, no more than one or two letters expressed an opinion or concern contrary to that of the majority.

The following sections of this report contain a general description of each stakeholder group and a summary of the responses typically received from that group.

Citizens

Respondents were classified as citizens if they were individuals or families, not clearly associated with any community organization, business, or government agency. From the 592 responses received from citizens, the following major issues were identified:

- Of the 465 responses received regarding the PRP preferred remedy, 464 did not support
 the PRP-preferred remedial alternative. Most respondents felt that by leaving the PCBcontaminated material in and around the river, the remedy would not adequately reduce
 the risk to human health or the environment.
- 433 responses were critical of the accuracy and completeness of the draft RI/FS.
 People found some of the data analysis methods to be unreliable and the remedial alternatives presented to be inadequate.
- 320 responses were written in support of the KRPA's position regarding cleanup proposals.
- Nearly half of citizen respondents (245 total) felt that the MDEQ has been too lenient with the PRPs, especially regarding delays in the cleanup process.
- 105 respondents expressed concern about the impacts of PCB contamination on human health.

See Appendix A for a representative listing of citizen comments.

Community Organizations

Community organizations were defined as citizen groups that were not affiliated with any government organization. These groups included environmental associations, councils, property associations, and other local organizations. The MDEQ attempted to identify the number of members in each organization by contacting each letter's author; it is assumed that a letter from a community organization has the support of its membership. The comments submitted therefore possibly reflect the opinion of roughly 2,000 members of small local organizations and 315,000 members of larger regional organizations.

Many of the same responses received from citizens were also received from community groups. There was very little difference of opinion on the main issues discussed earlier, such as the accuracy of the RI/FS and opposition to the PRP-preferred remedy. Other specific issues raised by community groups included:

- Concerns that natural attenuation processes would spread contamination, but not eliminate significant contaminant mass through chemical decomposition
- A perceived conflict of interest involving the National Academy of Sciences Committee on Remediation of PCB Contaminated Sediments and a research project being conducted Dr. John Giesy (a committee member) with funding provided by the KRSG
- The continued viability of floodplain areas during and after remedial action

Actual comments exemplifying those received from community organizations can be found in Appendix B.

The following community organizations submitted either letters or resolutions expressing their concerns and comments in response to the draft RI/FS:

Organization ¹ (and estimated membership)	Representative(s)
Allegan Woman's History Class (18)	Gladys Mosier
Audubon Society of Kalamazoo (300)	Kay M. Chase, Eco-Action Chair
Board of Directors from Bay Shores Association (7)	Ken Weiss, Vice President
Douglas Lake Shore Association, Inc. (unknown)	A.J. Lyon, President
Friends of the St. Joe River (75)	Eldred Adams
Green Vision Foundation (unknown)	Suzy Richardson
Holland Area League of Women Voters (55)	Carol McGeehan, Natural Resources Chair and Arlene Sherman, President
Kalamazoo Environmental Council (9,000)*	Judy Mayo, Chairperson
Kalamazoo Environmental Council	Mary Hosley, Chair
Kalamazoo River Protection Association (200+)	Dayle L. Harrison, President
Kalamazoo River Watershed Council (1,300)**	Robert G. Beck, President
Kalamazoo Sunrise Rotary Club (unknown)	Cherie Venable-Archambault, President
Kalamazoo Valley Chapter , Trout Unlimited (525)	Edward J. Hoover, Resource Committee Chairman
Lake Michigan Federation (1,000)	Tanya Cabala, Michigan Director
Lakeshore Interfaith Institute (15)	Glenn Davenport, Clerk
League of Women Voters of the Kalamazoo Area (unknown)	Connie Ferguson
Michigan Environmental Council (200,000)*	Lana Pollack
Michigan United Conservation Clubs (100,000)	Dennis Fox, Environmental Policy Specialist
Positives for Peace and Environmental Justice (unknown)	Gary Karch
Pottawatomie Hunt Club (6)	Peter W. Steketee
Surfrider Foundation Lake MI Chapter (100)	Rick A. Boss, co-director
Two Worlds Intertribal Lodge (50 families) and Lost Tribes Band, SE Cherokee Council (3,500)	Dale Strong Bull Hyatt and Betty Red Earth Woman Hyatt
West Michigan Environmental Action Council (600)***	Thom Peterson, President and Thomas Leonard, Executive Director

¹ groups > 1,000 members are counted separately avoid masking the membership of smaller local organizations

* includes number of members in membership groups

** generated from mailing list

*** number of member households

Local Agencies and Officials

Local Agencies were defined as government organizations which, due to their proximity to the Kalamazoo River, have an interest in the results of the RI/FS. This group include township and city councils, and government offices related to water resources.

Many responses, similar to those received from citizens, were also received from local agencies. There was very little difference of opinion on the main issues discussed earlier.

Specific comments submitted by local agencies include:

- Desire for a specific clean-up standard of 0.15 parts per million for sediments. This
 value was chosen based on the success of the Bryant Mill Pond cleanup
- A request for transfer of the project lead from the MDEQ to the U.S. EPA

See Appendix C for examples of actual comments from local agencies and officials; the following local entities submitted letters or resolutions expressing their concerns and comments in response to the draft RI/FS:

Local Agency	Representative
Allegan County Board of Commissioners	Joyce Watts, Clerk
Charter Township of Comstock	Anna Scott, Clerk
Charter Township of Kalamazoo	Gary L. Cramer, Township Supervisor
City of Fennville	Dennis Martin, Mayor
City of Kalamazoo	Donald F. Cooney, Commissioner
City of Kalamazoo	Hannah McKinney, Vice Mayor
City of Kalamazoo	Robert B. Jones, Mayor
City of Saugatuck	Ellen Clark, City Clerk/Treasurer
Comstock Township	Kurt J. Kremlick, Jr.
Cooper Township Board	Bonnie L. Sytsma, Clerk
Kalamazoo County Board of Commissioners	David Buskirk, Chairperson
Kalamazoo County Drain Commission	Mary B. Powers, Commissioner
Kalamazoo County Office of Parks and Recreation	B. Robert Gregerson, Parks Director
Manlius Township	Kathy Lubbers, Clerk
Prairieville Township, Four-Township Water Resource Council	Kenneth M. Kornheiser, DVM, Chairman
Saugatuck Township Board	Jane Wright
Trowbridge Township	Dave Loudenslager
Valley Township Board	Sally James, Clerk
Village of Douglas	Barbara McVea, Clerk/Treasurer

A total of 12 local agencies also submitted an endorsed version of the KRPA resolution along with their response letters. The text of this resolution is provided in Appendix F.

Industry Representatives

Respondents listing a business address or business name with their letters were classified as industry representatives. This group included local businesses, such as marinas and nurseries, as well as vendors of environmental technologies. The following table lists businesses and representatives that sent in responses during the RI/FS comment period:

Company	City	Representative
Marina Man	Douglas, MI	Charles Astel
Animal Clinic	Kalamazoo, MI	Charles Mehne DVM
FredFlyGuy Fishing Company	Unidentified	Unidentified
Aqua Blok	Toledo, OH	John H. Hull, P.E. (President)
Grape Harbour	Saugatuck, MI	Larry S. Mims
Cedar Hill Farm	Galesburg, MI	Marcia V. Stucki
Flowerfield Enterprises	Kalamazoo, MI	Mary Appelhof
Willson Insurance	Kalamazoo, MI	Philip G. Willson
Sheriden Law Offices, P.C.	Douglas, MI	Philip J. Sheriden
People's Food Co-op	Kalamazoo, MI	Sue St. Unge, Manager

Representatives from industry organizations also tended to have concerns similar to those expressed by citizens. Other issues brought up by these groups included:

- Consideration for a large-scale capping of in-stream contaminated sediments
- Use of a natural resource damage assessment to recover costs from the PRPs
- Effects of contamination on recreational boating

Examples of actual comments from industry organizations can be found in Appendix D. One industrial group also submitted a version of the KRPA resolution found in Appendix F.

Legislators

Three comment letters were submitted by respondents holding a political office at the state government level (categorized as legislators). The legislators, speaking for roughly 275,300 constituents, concluded the PRP-generated RI/FS was inadequate or should not be accepted by the MDEQ. Further, legislators speaking for roughly 193,000 constituents specifically expressed that they do not support the PRP-preferred remedial alternative. One letter each was submitted by State Representative Tom George and State Representative Ruth Ann Jamnick. Also, one letter was signed jointly by State Senator William Van Regenmorter and State Representative Patricia Birkholz. The complete text of these three letters can be found in Appendix E.

Representative George made the following statements, speaking for his 82,300 constituents:

- The RI/FS draft was inadequate
- The PRPs should be given a deadline of June 1, 2001 for further submissions.
- After that time, the RI/FS should be finalized according to an accelerated schedule.

Senator Van Regenmorter (representing 88,000 constituents) and Representative Birkholz (representing 105,000 constituents) stated that any plan falling short of removal of the contaminants should not be accepted; they also insisted on a long term solution that improves the Kalamazoo River ecosystems. Representative Jamnick did not specifically comment on any issues pertaining to the Kalamazoo River Superfund site.

The appendices attached to this letter provide sample comments and actual text from the various stakeholder groups, broken into categories described above. Please note that all comments were not included in this report. However, a representative sampling from each category was generated in attempts to objectively characterize the overall public sentiment toward the draft RI/FS and PRP-preferred remedial alternative. All comment letters are available for review in the files of the MDEQ.

Sincerely,

Brian von Gunten, Project Manager Superfund Section Environmental Response Division 517-373-6808

cc: Mr. Stuart Hill, U.S. EPA Mr. Thomas Short, U.S. EPA Ms. Eileen Furey, U.S. EPA

Appendix A: Citizen Comments

The majority of responses (592 letters; 90 percent of total letters submitted) received during the public comment period were from individual citizens and families. Sample comments are listed below, organized by the response category that the comment addresses.

1. Accuracy and Completeness of RI/FS (Total Responses: 433)

433 respondents were critical of the RI/FS. Generally, they found some of the analysis methods to be unreliable and the alternatives presented inadequate.

"I am deeply concerned about the inadequacy of the RI/FS, which has been prepared by the liable parties/polluters. Their plan/study is filled with false assumptions and misleading information."

"The RI/FS completed by the polluters is largely self-serving, incomplete, factually inaccurate and includes two volumes of information submitted without MDEQ review and oversight in violation of the AOC and Superfund laws."

"A realistic RI/FS would include: Remediation objectives in the document. Dividing the river into workable units for remediation and not proposing one alternative for the entire site. Removal of PCB contaminated materials to concentrations consistent with levels protective of wildlife, as determined in the ecological risk assessment. Restoration of disturbed natural habitat after PCB removal."

2a. PRP Preferred Remedy - Against (Total Responses: 464)

Of the 465 responses received regarding the PRP preferred remedy (most of any category), 464 did not support the PRP-preferred remedial alternative. Most respondents felt that leaving the PCB-contaminated material in and around the river would not eliminate the risk to the environment. Most respondents also questioned the applicability of natural attenuation to this system.

"Their plan will not clean up the Kalamazoo River."

"Their plan to "let nature take its course" and to just stabilize the banks of the DNR impoundments (areas behind the dams) would leave Lake Allegan and the rest of the Kalamazoo River a permanent toxic waste dump."

"Alternative 3, the PRPs preferred remedy, also is unacceptable since it does not deal with contaminated sediments in the major impoundments. These will continue to release PCBs into the environment and continue to be a risk to human health and the environment."

"I feel just issuing fish consumption advisories and long term monitoring are not enough."

"I am by no means a chemist or biologist but I do know that natural attenuation does not work, if it did then by now the River would have been clean."

2b. PRP Preferred Remedy - For (Total Responses: 1)

Out of 465 responses, only one was written in support of the PRP proposed remedial alternative.

"The U.S. EPA representative thought that all the individuals in the audience felt that Remedial Alternative 3 was inadequate and not acceptable. I think that this approach is a very reasonable step in the right direction."

3. Request for Agency Completion of RI/FS (Total Responses: 436)

Most of the same respondents who criticized the RI/FS and PRP preferred remedy were also in favor of having the MDEQ complete the final RI/FS, instead of the PRPs. 436 letters were received supporting this position, while no letters were received taking a stance against it.

"The completion of the Phase I - RI/FS for the river from Lake Allegan upstream thru the city of Kalamazoo should be immediately taken away from the polluters and be completed by the MDEQ consistent with the Administrative Order of Consent (AOC). Also, the Phase II - RI/FS for the River downstream of lake Allegan to Saugatuck, barely started, should be completed by the MDEQ and not the polluters/liable parties."

"It is time the MDEQ took charge of this site, perhaps the worst toxic site in the Great Lakes Basin."

4. Alternative Cleanup Options - Dry Dredging (Total Responses: 151)

151 responses were received from citizens asking that dry dredging either be used or be further researched. No respondents spoke out absolutely against dredging, but some did express concerns about the possibility of making the spread of contamination even worse than it is now.

"Dry excavation/dredging technology should be reviewed."

"Constant monitoring must take place at the mouth of the river during dredging operations."

"I strongly support (Alternative 5): River-wide dredging of all 16 million cubic yards of submerged sediments; disposal of sediments with on-site facility to be built; stabilize riverbanks in three former impoundments; continue fish consumption advisories; and conduct long-term monitoring and maintenance."

5. Alternative Cleanup Options - Innovative Technologies (Total Responses: 2)

"The disposal of PCB contaminated material must be disposed of in an off-site licensed landfill or through a yet to be determined PCB decontamination technology."

"Bottom line is I've satisfied myself that there is a global view of PCBs and hard pesticides that should be taken into consideration for local planning."

6. Alternative Cleanup Options - KRPA Proposed Plan (Total Responses: 26)

In addition to the KRPA form letters, which were submitted, 26 respondents openly supported the KRPA proposed plan.

"The cleanup alternative (proposed remedy) I recommend is this: Cleanup standards be consistent with the wildlife ecological risk assessment and the human health assessment. All

PCB-contaminated waste must be disposed of off site in approved landfills. No landfills should be allowed adjacent to the river, the DNR impoundments, Lake Allegan and the backwaters above the City of Allegan dam and the dam located in Otsego. Wetlands and other significant natural resources must be restored as part of the final remedial action."

"I am writing in support of the Kalamazoo River Protection Association's (KRPA) position regarding the clean up of the Kalamazoo River."

7. KRPA Preferred Cleanup Schedule (Total Responses: 320)

As part of their form letter, the KRPA proposed a cleanup schedule starting with the completion of the RI/FS by the MDEQ. Most of these 320 responses were received through form letters.

"Remedial action should begin concurrently at Lake Allegan and the impoundments upstream to avoid delays in the cleanup. The final RI/FS for Phase I should be completed by June 30, 2001 and the final RI/FS for phase II, (Saugatuck to Lake Allegan Dam) by September 30, 2001."

8a. Cleanup - PCB Removal - Against (Total Responses: 2)

Two responders addressed the removal of PCBs with concerns about spreading of the contamination. It was not clear in these letters whether the writers supported the PRP plan or whether they were interested in alternative cleanup methods.

"I suggest that if anyone starts dredging up that toxic muck bottom they'll spread PCB from here to New Orleans and won't improve the condition of the Kalamazoo River one iota!"

8b. Cleanup - PCB Removal - For (Total Responses: 54)

54 respondents specifically requested that the final remedial action include the removal of PCB-contaminated materials from the river. Some responses asked that all PCBs be removed, while others recognized that a cleanup goal must be established.

"Please choose a remedy for the Kalamazoo River where the PCBs are removed from the river."

"I therefore am highly in support of performing some cleanup of the Kalamazoo River and its tributaries, but I do not support a cleanup program with the goal of total cleanup no matter what the cost, because I don't feel it is possible."

"In my opinion, whatever needs to be done to restore the river to its natural state and to rid it of PCBs needs to be done."

9. Cleanup Standards (Total Responses: 409)

Most, if not all, of the 409 responses in this category stated that they expect cleanup standards established for the river that would protect human and environmental health.

"Cleanup standards must be consistent with the wildlife risk assessment, human health assessment, and the protection of property values."

"I would also like to see some better language in the RI/FS about proposed cleanup standards."

"I request that any proposed cleanup must be protective of human and environmental health. This is to mean that all water exposed sediments must be cleaned up to 0.12 ppm, all terrestrial cleanup to 0.7 ppm or lower."

"A minimum 1/4 mile vegetation green belt should be required up gradient of the 500-year floodplain existing and former impoundments."

10. Disposal of PCB-contaminated Material (Total Responses: 405)

The majority of respondents (405/592) want a disposal facility built off-site to prevent future contamination of the river. No respondents spoke out against off-site disposal or in favor of construction of an on-site disposal facility.

"All PCB contaminated waste must be disposed of off site in approved landfills. No landfills should be allowed adjacent to the river, the DNR impoundments, Lake Allegan and the backwaters above the City of Allegan dam."

11. Ecological Impacts (Total Responses: 16)

Sixteen responses expressed concerns that the river would not be returned to a healthy ecological state, if the PRP preferred remedy is selected.

"Their proposal to stabilize certain river banks would leave the river and Lake Allegan as permanent toxic PCB disposal dumps and would do nothing to reduce the significant risk to the river ecosystem which includes fish, mice, owls, eagles and mink."

"Preventing further contamination is not enough. The wildlife, the river, and the people of southwest Michigan deserve and demand better - we want the Kalamazoo River returned to its pre paper-company state."

12. Ecological Restoration after Cleanup (Total Responses: 267)

Close to half (267/592) of the respondents specifically expressed that an ecological restoration must be included as part of the final remedial action.

"All wetlands and other significant natural resources must be restored as part of the final remedial action."

"Removal of all PCB-containing sediments and soils in the Kalamazoo River Basin must be instituted through dry excavation followed by total restoration of all affected wetlands, floodplains, uplands, rivers and creeks."

13. Health Impacts (Total Responses: 105)

105 respondents expressed concerns about the impacts of PCB contamination on human health. One respondent felt that PCBs were not a proven human carcinogen, while others felt that the PCBs might be a cause of cancer in the Kalamazoo River area.

"The river's fish are toxic and in many areas its banks and bottom are so contaminated that they are unsafe for humans and other life."

"Many years of inaction has allowed an entire river system, one which feeds the Great Lakes, to remain a toxic waste dump, in effect poisoning the people of the Kalamazoo River watershed"

"Everybody interested in the protection of human health should be gratified to learn that the human cancer risk from PCBs is much smaller than originally projected."

"I believe we in the Saugatuck/Douglas area have an epidemic of cancer."

"We do not feel safe swimming in the water because of the contamination."

"The long-term public health and environmental health of the river should be the guiding principle in developing a clean-up plan."

14. Recreation Impacts of Contamination (Total Responses: 4)

Four citizens expressed concern over their inability to participate in recreational activities due to the PCB Contamination.

"I can say for myself that if the proposal to simply cover the contaminated sediment with clean fill is adopted, I will never feel comfortable enough about the PCB contamination levels to ever use the Kalamazoo River for recreational purposes."

15. Recreation Impacts of Remedy (Total Responses: 406)

A majority of respondents (406/592) included a comment regarding the inclusion of recreational management in the final remedial action. They believe that the remedial action must take into account future uses of the river, such as the removal of dams.

"Remedial action must be consistent with the long-term fisheries and wildlife management plans (since the early 1970's) to improve the river's fishery, recreation, and tourism opportunities by complete removal of the three MDNR dams."

"Allow full future resource management, not limited by choice of remediation method"

"People should be able to swim, canoe, or fish the river, and eat the fish, without worrying about being poisoned."

16. Tourism Impacts (Total Responses: 286)

Close to half of the respondents (286/592) believe that removing PCBs would result in a large increase in tourism income, and that by not removing the PCBs, tourism opportunities would continue to decrease.

"Once the removal of the PCBs in the river is completed, Allegan and Kalamazoo counties would benefit from millions of dollars in tourism related activities."

"If the River is not cleaned up, property values along the river will drop and countless recreational and tourism opportunities will be lost forever."

17. PRP Past Actions (Total Responses: 13)

Thirteen respondents condemned the past actions of the PRPs, focusing mainly on perceived delays of cleanup.

"These polluters have spent the last 10 years figuring out how not to do what by law they must do."

"I am very suspicious of the motives of representatives of the polluting companies."

"As a long time resident of Saugatuck and a recent cancer patient, I am very disturbed to learn the paper companies have been delaying the cleanup of the Kalamazoo River."

18. Cost of Remedy - Liability of PRPs (Total Responses: 47)

47 respondents wrote to express their opinion that the PRPs should be liable for the entire cost of the cleanup. Some also noted that the cost of an aggressive cleanup would be reasonable based on the Bryant Mill Pond cleanup, and the size of the PRP companies.

"The major paper companies are liable for the toxicity of the Kalamazoo River."

"The EPA emergency intervention at Bryant Mill Pond (part of the Kalamazoo River Superfund Site) showed that cleanup is not only possible, it is affordable."

"Whether or not the companies involved in the pollution understood the ramifications of dumping PCBs into the river years ago, they should be held accountable today for their actions."

"We haven't heard what we can afford to spend on a cleanup. If we can afford the cleanup without bankrupting the liable parties (and throwing their employees out of work), I want the cleanup accomplished."

"It is their financial and moral responsibility to remove every bit of toxic sediment from Portage Creek to Lake Allegan."

19. MDEQ Policies/Treatment of PRPs (Total Responses: 245)

Nearly half of citizen respondents (245/592) expressed an opinion that the MDEQ has been too lenient with the PRPs, especially regarding delays in the cleanup process.

"The polluters/liable parties have been in control of this site for far too long and have abused the Superfund process, often with the help of top management within the MDEQ."

"I am also outraged at the inaction of government officials such as Russell Harding, director of the MDEQ, whose job it is to see that laws protecting Michigan's environment are enforced."

"To remove an active and effective site manager (DNR) and split duties of other DEQ personnel because the PRP felt they were not cooperative, simply shouts "political payoff"."

"It seems extremely clear to me that the PRPs are being given too much leniency."

20. Project Transfer to the U.S. EPA (Total Responses: 3)

Three respondents commented that they would prefer having a U.S. EPA enforcement lead on the project instead of the MDEQ. No comments were received expressing an opinion against transferring the project lead to the federal government.

"An adequate clean up will only occur if the MDEQ immediately takes over the writing of the RI/FS and/or the EPA takes over the site."

"This attempt by the polluters, in cooperation with the state of Michigan, to shirk their responsibility is a clear example of why local units of government cannot adequately police environmental clean-up efforts of large or even moderately sized corporations."

Appendix B: Community Group Comments

Approximately 4.3 percent of responses were received from community groups. The comments of community groups were very similar to the comments of individual citizens, although these groups did raise some issues not mentioned by individual citizens. Listed below are examples of comments specifically from community groups, or comments that addressed different issues from those of citizens in general.

1. Accuracy and completeness of RI/FS

"The draft RI/FS does not comply with any of the NRC recommendations. The NRC publication defined a low likelihood of success of natural attenuation in PCB contaminated sediments. No evidence is presented to support that natural attenuation will be effective in this site as suggested on page 140 of the publication. For these and many other reasons we ask the draft RI/FS be considered incomplete and unacceptable."

2a. PRP preferred remedy

"The MDEQ must reject the Liable Parties proposed remedy because it does not even meet the Threshold Criteria of the nine criteria in accordance with the NCP. A remedy cannot be selected under CERCLA that does not meet the Threshold Criteria. Specifically, the Liable Parties natural attenuation remedy does not comply with state or federal laws known in Superfund as ARARs, is not protective of human health and the environment, does not accomplish the remedial action objectives, does not provide a permanent cleanup solution, and is totally unacceptable to the community."

"It is our position that in the case of highly persistent chemicals such as PCBs "natural attenuation" does not occur as chemical decomposition at any substantive rate but merely represents a degree of flushing, sequestration, or migration to biota."

9. Cleanup Standards

"We urge you to direct the MDEQ to insist on the most stringent cleanup measures to protect public health and water quality of the Kalamazoo River and Lake Michigan, our source of drinking water."

12. Ecological Restoration

"The remedy must address the continued viability of the floodplain forest areas which harbor a unique flora and fauna and provide vital habitat for several bird species."

15. Recreation Impacts of Remedy

"The cleanup remedy must include the removal of specific dams on Portage Creek and the Kalamazoo River. Removing these dams will produce a run of the river warm water fishery and recreational boating opportunities that could be second to none in the state of Michigan. The dams that must be removed on the Kalamazoo River are the Plainwell Dam, Otsego City Dam, Otsego Dam, Trowbridge Dam, Allegan City Dam, and the Alcott Street Dam on Portage Creek. The removal of the Allegan City Dam will need additional design work to allow the city's waterfront to be unaffected. An off-channel pond must be constructed during the Superfund excavation and removal of all the PCB contaminated waste. The cleanup remedy must include plans to increase the depth of Lake Allegan and all the navigational channels and marinas on the downstream portion of the Kalamazoo River. This increase in depth will be the natural outcome from the excavation of the PCB contaminated sediments."

19. MDEQ Policies/Treatment of PRPs

"Since being placed on the National Priorities list under the Superfund list in 1990, the state of Michigan has failed to provide the needed leadership."

"Particularly disturbing are such things as the removal of the project manager at the behest of the PRPs; the involvement of Dr. Geisy as a paid consultant for the PRPs, when he is also a member of the American Academy of Sciences panel that will review the final remedy; and the political maneuvering that appears to preclude one possible remedy - dredging - by attaching sanctions to a Congressional budget bill."

"Studies were done, thousands of animals sacrificed, and many man-hours invested on work that should have been followed up, and you people have declared all that WASTED. You have let the people who did the polluting dictate the remedial action."

21. Possible conflict of interest involving MSU project

"We would appreciate your inquiry into the appropriateness of Dr. Geisy being on the NAS committee charged to evaluate "different approaches for remediating PCB-contaminated, submerged sediments" and while conducting a \$1,000,000 study sponsored by PRPs of the PCB contaminated Kalamazoo River Superfund Site. We believe that it appears to be a conflict of interest."

Appendix C: Local Agency/Officials Comments

Approximately 3.3 percent of responses were received from officials and representatives of local government agencies, who actually represent the people of many communities in the Kalamazoo watershed. The majority of these responses also included the adoption of a version of the KRPA resolution, which can be found in Appendix F. The comments listed below are examples of those that were not addressed in Appendix A (Citizen Comments) but were included in the response letters of local agencies or officials.

2a. PRP preferred remedy

There is ample evidence that the breakdown of PCBs proceeds at a very slow rate and that river bank stabilization is unlikely to adequately hold the PCB contaminates in place. Therefore it is almost inevitable that Alternative 3 will result in continued long term risk to the river habitat and its wildlife and human inhabitants.

9. Cleanup Standards

Sediments must be removed, with remaining PCB's left at less than .15 ppm (Bryant Mill Pond went from 1000 ppm to less than 1)

20. Project transfer to EPA

Given the extreme complexity of this project, the city feels that the U.S. EPA's greater resources might accelerate final cleanup of the Allied Paper/Portage Creek/Kalamazoo River Superfund site in a manner acceptable to all parties. If the U.S. EPA were to become the lead agency on this project, the city would also strongly recommend that the U.S. EPA do the required investigatory and remedial work itself.

Appendix D: Industry Group Comments

Approximately 2.0 percent of responses were received from representatives of industry groups. As with other groups, most of the comments received from industry groups were in line with comments from citizens. Other issues and concerns were raised by these groups however, as listed below:

5. Alternative Cleanup Options - Innovative Technologies

"In brief we believe that implementation of Alternative 4 at the site should be re-evaluated within the context of using clay based Aquablok sediment capping technology, either as a replacement

for or perhaps in concert with the sand-and gravel-based capping designs currently considered for Alternative 4."

6. Alternative Cleanup Options - KRPA Proposed Plan

"In summary, I stand united with the KRPA and the Kalamazoo River Watershed on requesting an aggressive, non BB&L involved cleanup of the Kalamazoo River Operable unit."

11. Ecological Impacts

"An aggressive NRDA (should) be addressed to compensate for any damage done to our riverine habitat."

14. Recreation Impacts of Contamination

"As a business directly effected by our Kalamazoo River the polluters and the clean up questions and delay have damaged me. The river is declared unfit to dredge, which results in the loss of use of boat slips, property and the free navigation of the river. The boat launch ramps have lost 50 percent of their revenue due to a lack of dredging of the channel between Shultz Park and the West Side of Kalamazoo Lake. Many slips are undredged and lost, causing boaters to move to other communities. The financial damages are in the millions."

18. Cost of Remedy - Liability of PRPs

"In addition to immediate remedy to the above losses, I believe legislation should be issued that would prevent polluters from moving assets, selling properties, or taking steps to isolate their financial exposure. It might require civil law that makes management culpable for planning such actions, and thereby undermining the public rights for cleanup and reparations."

20. Project Transfer to U.S. EPA Lead

"I request the return of Mr. Jim Hannenberg of EPA to the position of EPA project manager on this site."

Appendix E: Legislator Comments

Three total response letters were received from State of Michigan legislators. One of the letters was from state of Michigan Representative Ruth Ann Jamnick, which included a citizen letter she had received. Of the other two letters, one was received from Tom George, State Representative, while the other was signed jointly by Senator William Van Regenmorter and Representative Patricia Birkholz. The verbatim content of all three letters is shown below:

Text of letter to Brian von Gunten, MDEQ, from State Representative Ruth Ann Jamnick, March 1, 2001:

"Please find enclosed a copy of a recent letter sent to you from one of my constituents regarding the Remedial Investigation Feasibility Study of the Kalamazoo River Superfund site. [Citizen] has requested the courtesy of a reply to her concerns. Would you please forward a copy of your response to my office.

Thank you."

Text of letter to MDEQ Director Russell Harding, from State Representative Tom George, March 8, 2001:

"I am writing regarding the Kalamazoo River Superfund Site.

I have been asked by many of my constituents to support an immediate takeover of the Phase One RI/FS process by the DEQ.

I have instead taken the position that though the RI/FS draft is inadequate, the Department should be allowed to follow a timetable allowing the PRPs to continue submitting data for the RI/FS until June 1, 2001. After that time, the RI/FS draft should be considered final. The department should then develop a proposed plan by December 31, 2001.

I am writing to encourage you to allocate the MDEQ's staffing resources in such a manner so as to allow the above timetable to be met.

Additionally, I will support boilerplate language in the department's budget requiring such a timetable.

Thank you for your consideration in this manner."

Text of letter to MDEQ Director Russell Harding, from State Senator William Van Regenmorter and State Representative Patricia Birkholz, March 9, 2001:

"As you know, an 80-mile stretch of the Kalamazoo River from Kalamazoo to Saugatuck has been on the federal government's Superfund site since 1980 because of PCB contamination. Approximately 300,000 pounds of hazardous compounds were pumped into the river as part of paper waste from four paper mills in Kalamazoo and the Plainwell area. The PCBs have made their way into the sediments of the river and also in aquatic

life and wildlife along the river. Two decades after the Superfund declaration, there still has not been a significant cleanup of the contamination.

Our offices have received significant correspondence, telephone calls and electronic messages from concerned citizens and communities about the Remedial Investigation Feasibility Study (RI/FS) which was prepared by the liable parties. Neither we nor our constituents are supportive of the environmental clean up plan that has been proposed by the four paper companies. Any plan that falls short of removal of the contaminates should not be accepted.

We know you will agree that this significant wonderful natural resource, which is an asset not only to our communities but to the whole tourism economy in Michigan must be protected. We urge the DEQ to reject the proposed plan by the liable parties and instead insist that a long-term solution, which improves the Kalamazoo River ecosystems, be the primary objective."

Appendix F: KRPA Resolution

The following resolution was produced by the Kalamazoo River Protection Association. Identical or slightly modified versions were adopted and submitted to the MDEQ by 12 local agencies, six community groups and one industry organization.

Resolution in support of the appropriate cleanup (preferred remedy) and restoration of the Kalamazoo River and comments on the RI/FS

Whereas, the cleanliness of the Kalamazoo River and Lake Michigan are critical to the well being of human health, the environment, recreation, tourism and the business of our community, and

Whereas, the Kalamazoo River (official site name is Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund site) has been on the National Priorities List under the National Superfund Act (Comprehensive Environmental Response Compensation, and Liability Act of 1980) since 1990 and at the top of Michigan's Environmental Protection List since 1985, and

Whereas, there are approximately 300,000 pounds of PCBs, a persistent toxic cancer causing chemical, in approximately six million cubic yards of river sediments, and fish consumption advisories have been in place since 1976 and will continue far into the future until the PCBs are removed from the River. Bald eagles and other wildlife are not reproducing, and

Whereas, in 1990 the liable parties, referred to as potentially responsible parties (PRP's) under the Superfund Act, and the Michigan Department of Environmental Quality (MDEQ) entered into an Administrative Order of Consent (AOC) that granted the companies the opportunity to complete the Remedial Investigation and Feasibility Study (RI/FS) for the river and other documents and that a draft RI/FS for the river upstream from Lake Allegan to Comstock was finally submitted in November of 2000 (about six years past due), and

Whereas, the liable parties current names are Georgia Pacific Corp., Plainwell, Inc., Fort James Corp., and Allied Paper Inc. (parent company HM Holdings, Inc.) and the RI/FS completed by the Polluters is largely self-serving, incomplete, factually inaccurate and includes two volumes of information submitted without MDEQ review and oversight in violation of the AOC and Superfund laws.

Whereas, the preferred remedy submitted by the polluters in their draft Feasibility Study (FS) is woefully inadequate and would leave Lake Allegan, the impounded area above the city of Allegan dam, and the dam in Otsego City and the three Trowbridge, Otsego and Plainwell dams owned by the Michigan Department of Natural Resources (MDNR) as permanent toxic PCB disposal dumps in the river, and

Whereas, the cleanup and removal of the contamination and protection of human health of sportsmen and their families, tourism, wildlife, and the well being of future generations of our community are of paramount importance, and

Now, therefore be it resolved that the		is in full support
of the following recommendations and re-	quest that they be included in the publ	lic record of the
RI/FS and future proposed plans.		

It is further resolved that:

The responsibility for completion of the Phase I - RI/FS for Lake Allegan upstream to Morrow Pond should be immediately taken away from the polluters and be completed by the MDEQ consistent with the Administrative Order of Consent which provides the MDEQ with the authority to complete the RI/FS and other documents where it has been clearly demonstrated the polluters efforts have been inadequate. Also, the Phase II - RI/FS for the river downstream of Lake Allegan to Saugatuck, barely started, should be completed by the MDEQ and not the polluters.

Recommended Cleanup Alternative (Preferred Remedy) to be included in the final RI/FS and Proposed Plan

Cleanup standards must be consistent with the wildlife ecological risk assessment, human health assessment, and the protection of property values. All PCB contaminated waste must be disposed of off site in approved landfills. No landfills should be allowed adjacent to the river, the DNR impoundments, Lake Allegan and the backwater above the city of Allegan dam. All wetlands and other significant natural resources must be restored as part of the final remedial action.

Remedial action must be consistent with the long-term fisheries and wildlife management plans (since the early 1970's) to improve recreational and tourism opportunities by complete removal of the three MDNR dams.

The polluters plan to "let nature take its course" and to just stabilize the banks of the DNR impoundments with riprap and to leave Lake Allegan and the rest of the river as a permanent toxic waste dump is not appropriate. It is adverse to wildlife, human health, property values, recreational and tourism potential and is contrary to the long-term community management plan for the river and must not be allowed.

Remedial action should begin concurrently at Lake Allegan and the impoundments upstream. The final RI/FS for Phase I should be completed by June 30, 2001 and the final RI/FS for phase II, (Saugatuck to Lake Allegan Dam) by September 30, 2001.